

REMARKS

1. Objection over the specification and the drawings:

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The specification is amended to overcome the examiner's objection to the informalities committed. The drawings objected to by the examiner are amended. Fig.1 is amended according to page 1, line 30 to page 2, line 11. Fig.12 is amended according to page 15, line 15 to page 16, line 6. No new matter is introduced.

10 Allowance of the amendments is hereby requested.

2. Rejection of claims 1, 3, 6, 7, 8, 10, 13 and 14 under 35 U.S.C 102(b) and objection of claims 2, 4, 5, 9, 11 and 12:

15 Claim 1 is amended according to the original claim 3, and page 20, lines 18-20. Claim 8 is amended according to the original claim 10, and page 20, lines 18-20. The new claims 15-18 are added based on page 21, lines 9-12 and Figs. 17-19. Claims 3 and 10 are canceled. No new matter is introduced.

20 Forthcoming arguments will show that independent claims 1, 8, 15 and 17, due to the manner in which they were modified or introduced in the current Office action are not anticipated by the prior art, and hence should be made allowable.

25 It is clear that the layer 2 data discard acknowledgment PDU comprises a first field that ensures the first station to determine the number of layer 2 SDUs discarded by the second station in the currently amended claims 1 and 8, and that the layer 2 data discard acknowledgment PDU comprises a first field that ensures the first station to determine layer 2 SDUs discarded by the second station in the new claims 15 and 17.

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The examiner believes that within the MRW acknowledgement PDU "any field in the data discard acknowledgement PDU helps to enable the first station to

determine the layer 2 SDUs discarded...” (refer to Office action, page 3, paragraph 5, line 10-12). In the APA, no single field alone in the MRW acknowledgement PDU ensures that the first station will know without a doubt the number of SDUs, or which SDUs have been discarded by the second station. Moreover, in the APA, the first station requires both the N and SN_ACK fields to be able to **sometimes** theoretically determine how many SDUs, or which SDUs, were discarded, while according to the currently amended claims 1 and 8, and the new claims 15 and 17, the first field (M field) alone can ensure how many SDUs, or which SDUs were discarded, all the time.

The applicant provides an example below illustrating a specific scenario in the prior art, in which the first station, when reading the acknowledgement PDU sent by the second station, is unable to ensure how many layer 2 SDUs, or which SDUs, were discarded by the second station. This has created the motivation for the current invention to add the new field M that ensures, rather than only enables, that the first station will know without ambiguity how many layer 2 SDUs, or which SDUs, were discarded by the second station.

Please refer to the last paragraph of the prior art (pages 11 to 12), which describes an ack request and ack response scenario. It is to be noted that this scenario will be used for both the argument proving the ambiguity of the current ack record, and conversely, proving of how the addition of a new field in the MRW acknowledgement PDU in the current invention eliminates this ambiguity.

In the aforementioned paragraph, the transmitter sends an MRW request PDU requesting the receiver to discard SDU_11, SDU_12 and SDU_13. The receiver replies with an MRW acknowledgement PDU that informs the transmitter that only SDU_12 and SDU_13 were discarded. Yet, on analyzing the MRW acknowledgement PDU, the transmitter incorrectly assumes that SDU_11, SDU_12 and SDU_13 were all discarded.

This occurs due to the fact that the MRW acknowledgement PDU is ambiguous, containing 3 fields that are insufficient for the transmitter to determine what SDUs

have been discarded by the receiver. The first field is the Type field, which identifies the PDU as an acknowledgement PDU. As the Type field does not pertain to the issue of ambiguity that is being discussed here, it will no longer be commented on.

5 The second field is the N field, which is equal to the N_{Length} field in the MRW request PDU, as it has been described in the prior art (page 10, lines 4-5). The third field is the SN_ACK field and, it is equal to the SN_MRW_{Length} in the MRW request PDU, as it has been described in the prior art (page 10, lines 5-7). As it was documented in the prior art (page 8, line 8-12) the SN_MRW_{Length}, together with the
10 N_{Length} , informs the receiver how the state variable VR(R) for its receiving window should be set. The N_{Length} indicates how many LIs (i.e. length indicators) and corresponding data in the SN_MRW_{Length} PDU should be discarded.

As a result, when the receiver sends the entries in the SN_ACK (i.e. same as
15 SN_MRW_{Length}) field and the N (i.e. same as N_{Length}) field to the transmitter, it only discloses the starting position of the receiver's receiving window (i.e. the state variable VR(R)) and what SDUs of the last PDU have been discarded. The N and SN_ACK fields do not tell the transmitter neither what or how many SDUs have been discarded, with the exception of the SDUs in the last PDU.

20 It becomes thus clear that the **receiver would generate three indistinguishable MRW acknowledgement PDUs whether SDU_11, SDU_12 and SDU_13 were discarded, or only SDU_12 and SDU_13 were discarded, or even if only SDU_13 was discarded.** The creation of the same MRW acknowledgement PDU for the three
25 distinct cases above, indubitably proves that the prior art MRW acknowledgement PDU is ambiguous.

This creates the need for a unique MRW acknowledgement PDU covering each of the 3 scenarios above, need addressed with the introduction of an additional field
30 by the current invention. For example, in the first embodiment of the present invention, the field M is added to the MRW acknowledgement PDU, which equals the number of SDU-terminating PDUs discarded. SDU-terminating PDUs are those PDUs that

contain the terminal end of an SDU. Hence, the number of SDUs discarded can be determined. In the embodiment illustrated in Figs. 17 to 19, the M field informs which SDUs are discarded, consequently the number of SDUs discarded is also known.

Therefore, the number of SDUs discarded and which SDUs are discarded are both
5 known.


Henceforth, it is obvious that the addition of the M field to the MRW acknowledgement PDU makes the MRW acknowledgement PDU unambiguous and in doing so it allows the receiver to know how many SDUs, or which SDUs, were
10 discarded by the receiver. This in turn, would permit the two stations to have proper data-synchronization with each other.

Therefore, the currently amended claims 1 and 8 and the new claims 15 and 17 should be patentable over APA. Further, the original claims 2, 4-7 are dependent on
15 the currently amended claim 1, the original claims 9, 11-14 are dependent on the currently amended claim 8, the new claim 16 is dependent on the new claim 15, the new claim 18 is dependent on the new claim 17, the dependent claims should be allowable if the independent claims 1, 8, 15, 17 are allowable. Reconsideration of the claims 1, 2, 4-9, 11-18 is politely requested.

20 Sincerely,

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Winston Hsu, Patent Agent No. 41,526
P.O. BOX 506
Merrifield, VA 22116
U.S.A.

Date: 

30 e-mail : winstonhsu@naipo.com.tw

(Please contact me by e-mail if you need a telephone communication and I will return your call promptly)

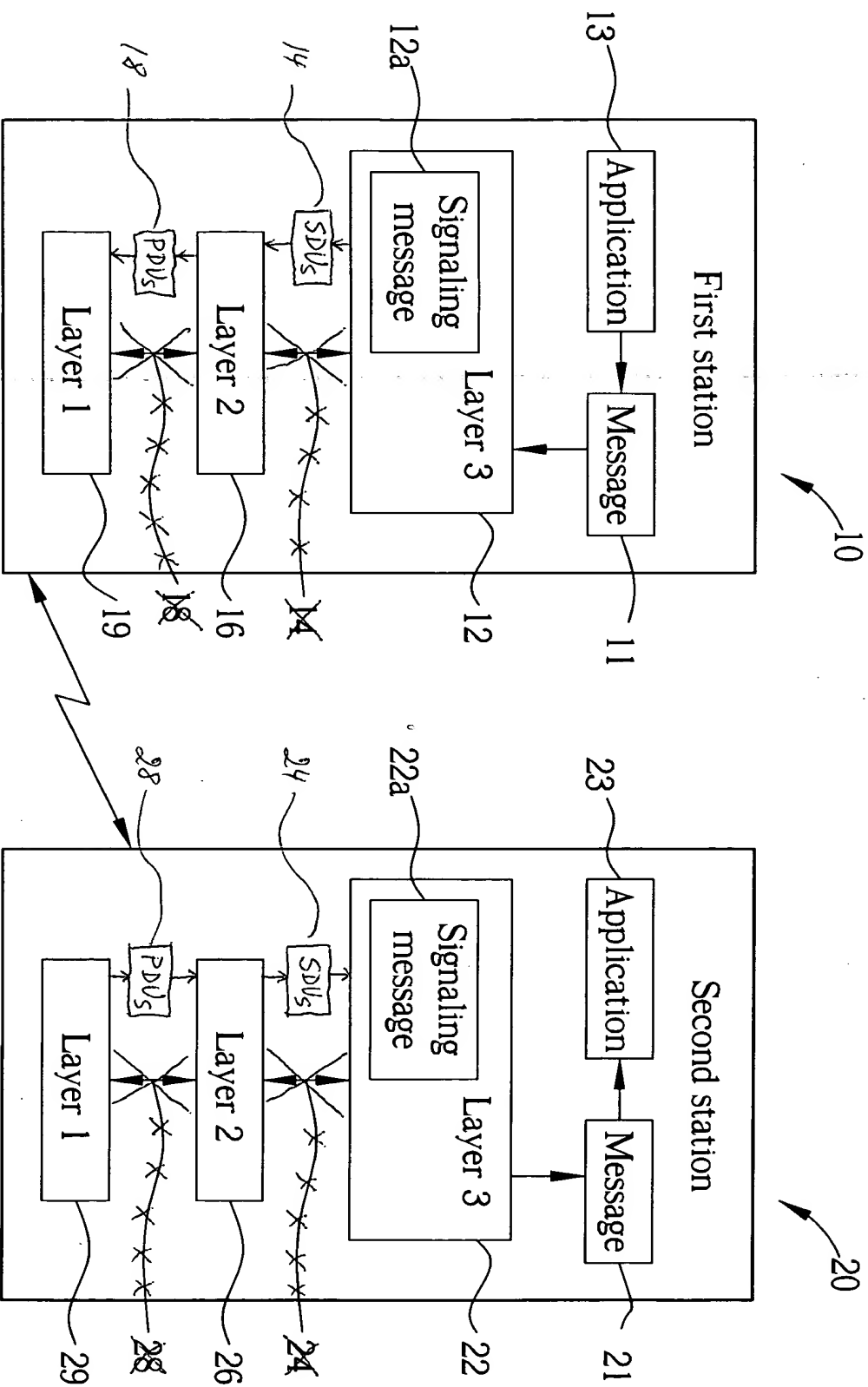


Fig. 1 Prior art

Annotated Sheet Showing Changes

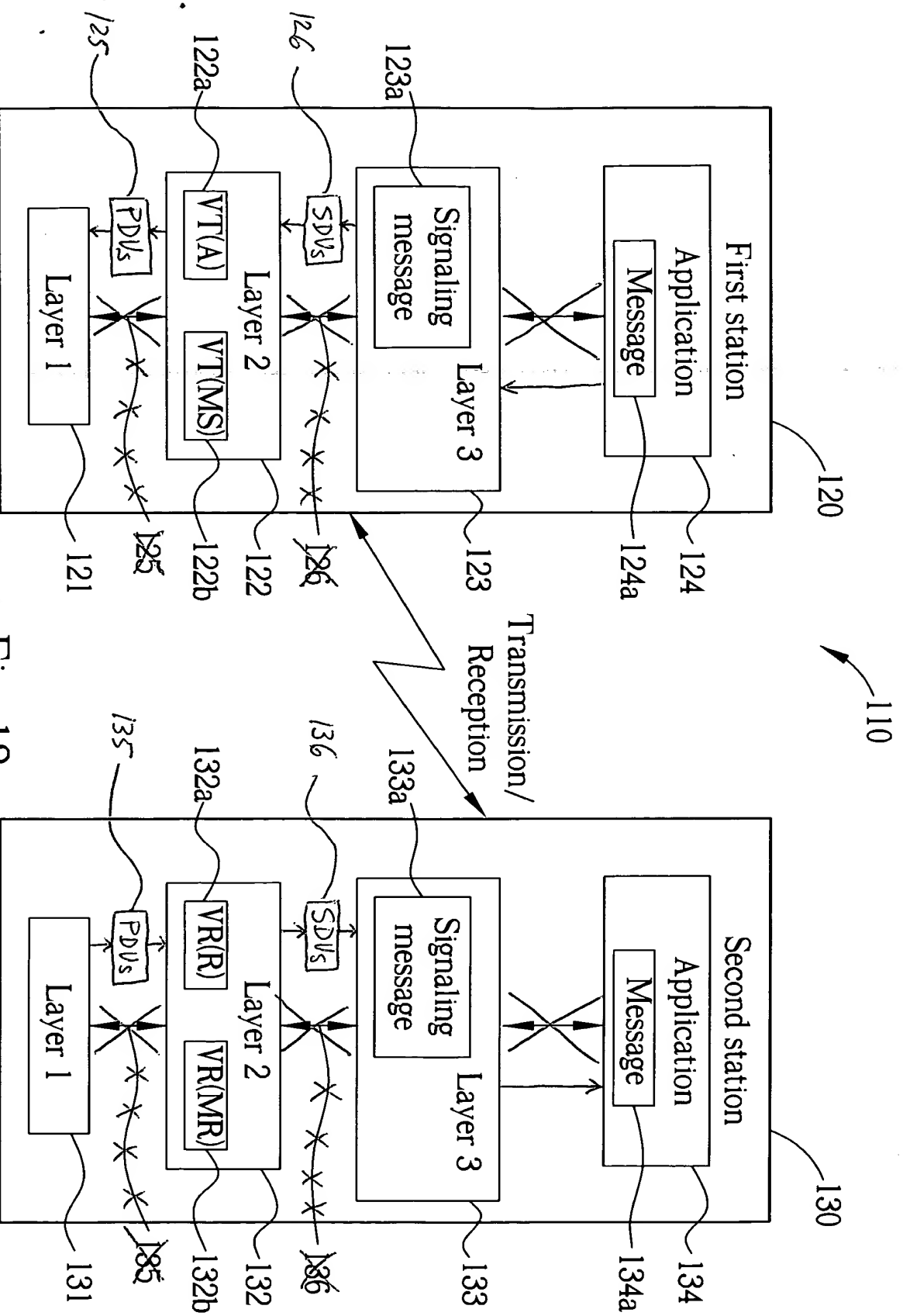


Fig. 12